

## Model 3022B CPVC Sprinkler Head Adapter Fitting Holdback Wrench

### General Description

The TYCO Model 3022B CPVC Sprinkler Head Adapter (SHA) Fitting Holdback Wrench is designed to aid in the service of CPVC fire sprinkler piping systems. The SHA Fitting Holdback Wrench is used to assist with the removal of a sprinkler installed in finished ceilings by applying a holdback on the sprinkler head adapter fitting, while a sprinkler wrench removes the sprinkler.

The wrench is specifically designed to work with TYCO CPVC sprinkler head adapter fittings. Since CPVC pipe and fittings are inherently flexible, caution must be taken to insure the pipe and fittings are properly restrained when removing a sprinkler.

The SHA Holdback Fitting Wrench is furnished complete with 3/8 in. drive socket extension and roller chain, see Figure 1. Two replacement chains are provided with each wrench. Replacement chain kits are separately available.

#### CAUTION

The user of the TYCO Model 3022B CPVC Sprinkler Head Adapter Fitting Holdback Wrench must read all directions and user precautions presented in this data sheet.

Failure to follow all printed instructions for this product may cause injury to the user or damage to the piping system and structure being worked on.

#### IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Always refer to Technical Data Sheet TFP700 for the "INSTALLER WARNING" that provides cautions with respect to handling and installation of sprinkler systems and components. Improper handling and installation can permanently damage a sprinkler system or its components and cause the sprinkler to fail to operate in a fire situation or cause it to operate prematurely.

As with use of all tools, proper training, safety equipment and OSHA requirements must be sought, worn and observed at all times.

Johnson Controls assumes no liability for the use or misuse of this product.

#### NOTICE

The Model 3022B SHA Holdback Wrench described herein must be utilized and maintained in compliance with this document, as well as the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION, in addition to the standards of any other authorities having jurisdiction (AHJ). Failure to do so may impair the integrity of this device.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

### Technical Data

#### Construction

The TYCO Model 3022B CPVC Sprinkler Head Adapter Fitting Holdback Wrench is comprised of a 3/8 in. drive socket extension, roller chain, cap and button head screw.

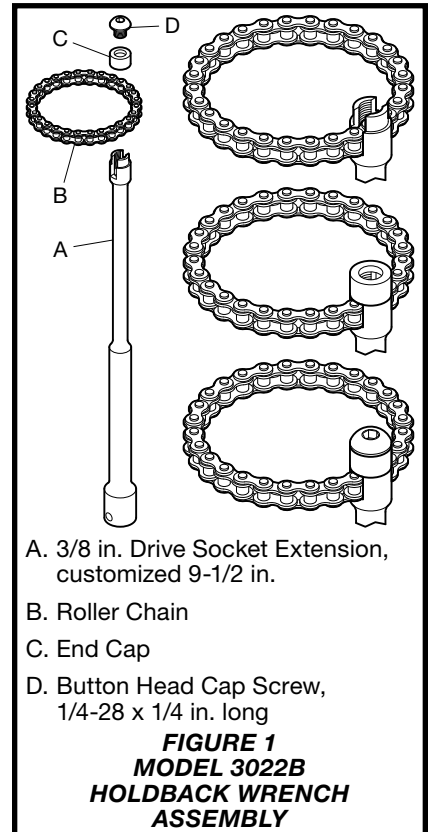
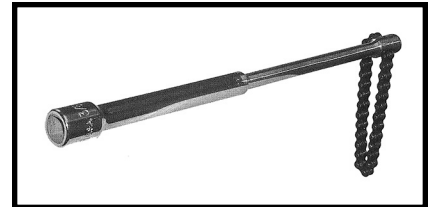
### Care and Maintenance

The TYCO Model 3022B CPVC Sprinkler Head Adapter Fitting Holdback Wrench must be maintained and serviced in accordance with this section.

A worn or broken roller chain must be replaced to prevent damage to CPVC fittings and pipe or personal injury. To replace a roller chain see Figure 1 for reference and perform the following steps:

**Step 1.** Loosen and remove Button Head Cap Screw using 1/4 in. hex bit or allen wrench.

**Step 2.** Remove End Cap.



A. 3/8 in. Drive Socket Extension, customized 9-1/2 in.

B. Roller Chain

C. End Cap

D. Button Head Cap Screw, 1/4-28 x 1/4 in. long

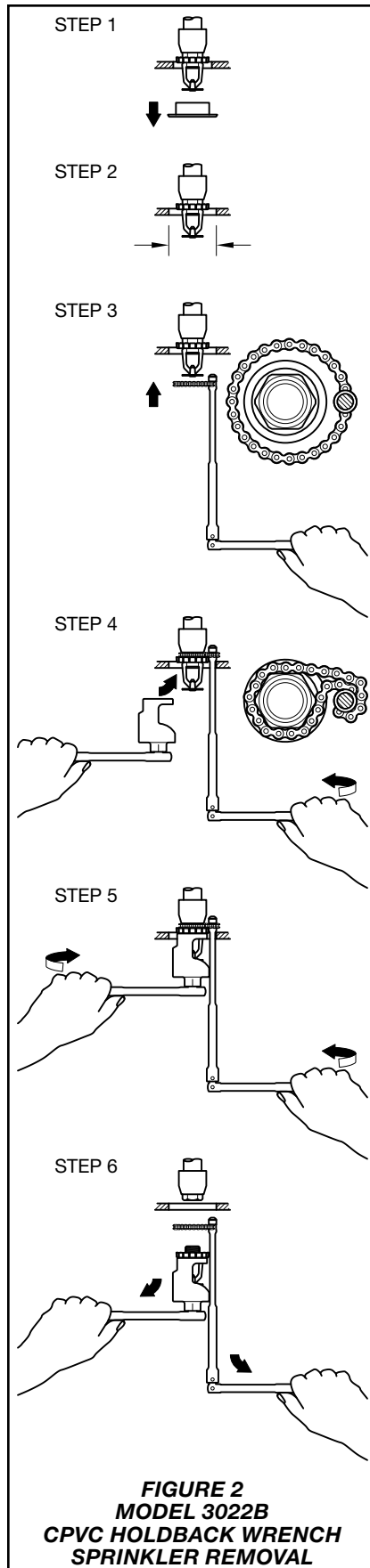
**FIGURE 1  
MODEL 3022B  
HOLDBACK WRENCH  
ASSEMBLY**

**Step 3.** Remove Roller Chain from Drive Socket Extension.

**Step 4.** Align and insert link of replacement Roller Chain into recessed end of Drive Socket Extension, ensuring link is fully seated.

**Step 5.** Align and fully seat End Cap onto end of Drive Socket Extension.

**Step 6.** Install Button Head Cap Screw into Drive Socket Extension, tightening using 1/4 in. hex bit or allen wrench. Do not over-tighten to avoid causing damage to threads.



**FIGURE 2**  
**MODEL 3022B**  
**CPVC HOLDBACK WRENCH**  
**SPRINKLER REMOVAL**

## Sprinkler Removal

### NOTICE

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, permission to shut down the affected fire protection system must be obtained from the proper authorities and all personnel who may be affected by this action must be notified.

A sprinkler system must be de-pressurized and properly drained before removing a sprinkler.

Other common hand tools, furnished by the user, are needed in conjunction with the TYCO Model 3022B SHA Fitting Holdback Wrench to facilitate removal of a sprinkler from a CPVC fire sprinkler piping system.

The Holdback Wrench accepts a 3/8 in. drive socket wrench, of either the ratchet or fixed type.

A sprinkler wrench of the type specified by the sprinkler manufacturer is required. Refer to applicable sprinkler technical literature. In applications where a recessed sprinkler wrench is necessary, attach it to a socket drive wrench of either the ratchet or fixed type.

A recessed sprinkler installation features a clearance hole of sufficient size to permit fitting an escutcheon closure ring. Typically, the hole must be enlarged to accommodate insertion and manipulation of the Holdback Wrench. A keyhole saw or similar tool may be used to enlarge the hole.

### CAUTION

Before cutting a ceiling, check the area surrounding the sprinkler for obstructions or electrical lines that can cause injury.

Prior to using the TYCO Model 3022B SHA Fitting Holdback Wrench, observe the following guidelines:

- work area is free and clear of debris
- sprinkler system is de-pressurized and properly drained
- sprinkler removal utilizing the holdback wrench is a two person task, the first to immobilize the sprinkler head adapter and piping and the second to remove the sprinkler
- personnel removing a sprinkler must wear safety glasses

See Figure 2 for reference and perform the following procedure to remove a sprinkler from a CPVC Sprinkler Head Adapter Fitting:

**Step 1.** Remove recessed sprinkler escutcheon closure if present.

**Step 2.** Enlarge sprinkler clearance hole in ceiling to accommodate holdback wrench.

**Step 3.** Spread wrench chain into circular arrangement and insert chain through enlarged sprinkler clearance hole.

**NOTE:** Details in Steps 3 and 4 of Figure 2 show holdback wrench chain and SHA fitting without sprinkler for fitting.

**Step 4.** First person engage chain onto SHA fitting brass hex insert, applying tension in clockwise direction to hold in place, removing slack to avoid wrench slippage and potentially damaging CPVC adapter and piping. Second person engage sprinkler wrench onto sprinkler, fully seating wrench recess on sprinkler wrenching area.

**Step 5.** Apply steady equal force in opposing directions on the SHA fitting and sprinkler, first person clockwise on fitting to prevent it from rotating and second person counterclockwise on sprinkler to remove from fitting.

**Step 6.** Withdraw sprinkler wrench with sprinkler and holdback wrench from the clearance hole.

## Limited Warranty

For warranty terms and conditions, visit [www.tyco-fire.com](http://www.tyco-fire.com).

## Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

### Model 3022B Wrench

Specify: Model 3022B CPVC Sprinkler Head Adapter Fitting Holdback Wrench, P/N 3022B

**NOTE:** Wrench includes two replacement chains.

### Replacement Parts

Specify: Chain Kit, Model 3022B CPVC Sprinkler Head Adapter Fitting Holdback Wrench, P/N 3011B

**NOTE:** Kit includes five replacement chains.